SWIM Connect 2014 Get Plugged In...

FAA View: What's in it for me



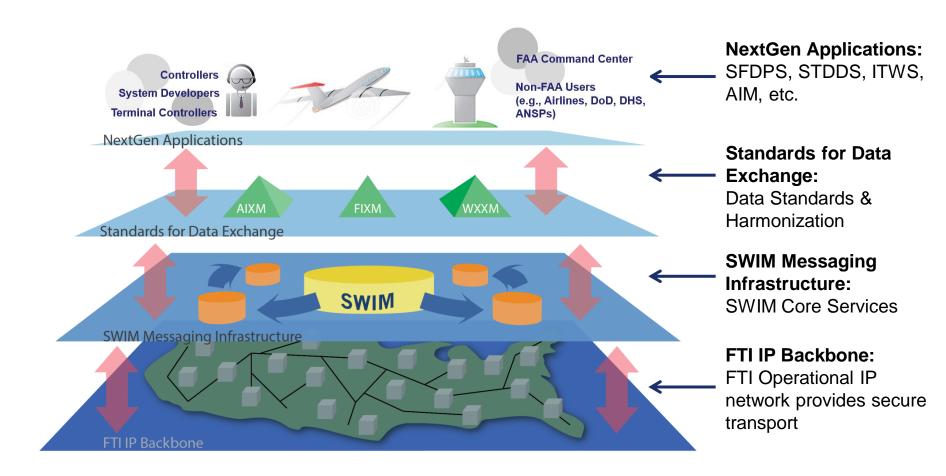
By: Joe Lahoud, SWIM Manager - FAA
Steve Link, SWIM Chief Systems Engineer - Harris

Date: September 29, 2014





Where is SWIM realized in the NextGen Architecture?







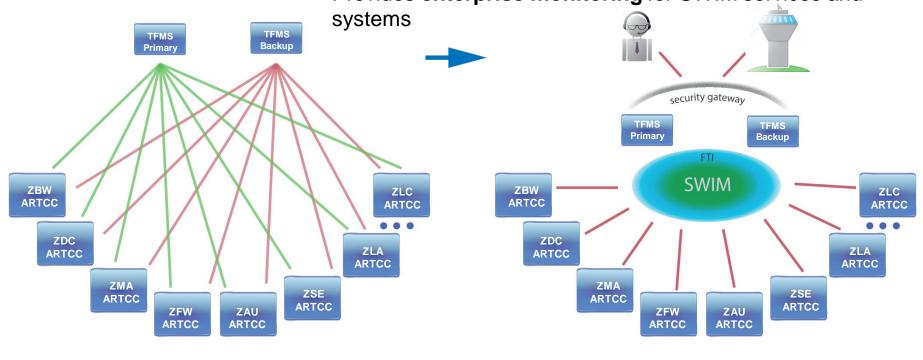
What are the Benefits of SWIM?

- Eliminate the **point-to-point connection** requirements
- Replaces unique interfaces with modern standards-based data exchange

Provides users **access to information** without directly connecting to another system

 Provides enterprise security services for all producers and consumers and incoming and outgoing data

Provides enterprise monitoring for SWIM services and



Before SWIM:

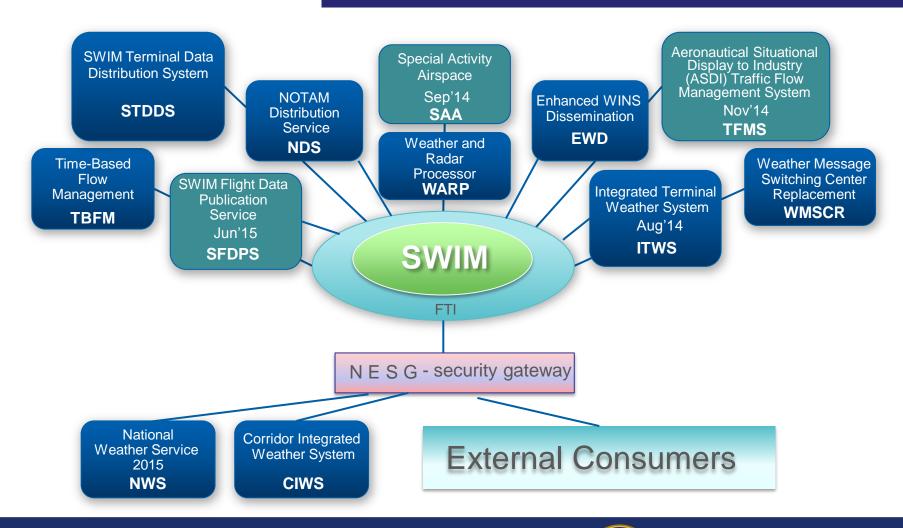
Point-to-point connections

With SWIM:

Data Exchange (Published once, consumed by many)

Q:

What FAA Programs Publish Content Through SWIM Today?

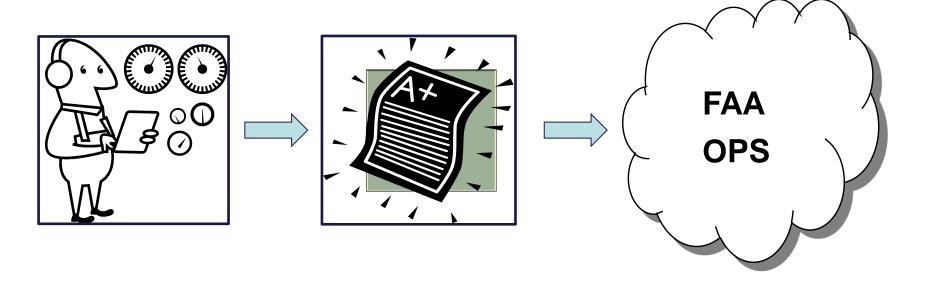








Are FAA Facilities available to support SWIM On-Ramping?



R&D Environment FAA Formal Test Bed

NAS Deploy Service





Q:

What is deployed today through SWIM?







How do Get Started?

- Email your request to: Data-To-Industry@faa.gov
- Useful Documentation:
 - FTI OPIP User Guide (for External Connections)
 - SWIM User Guide
 - SWIM Jump-start Kit
- Available Documents Available on FAA SWIM Website: www.FAA.gov/NextGen/SWIM

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What is the plan for providing services through SWIM?

Program	Discovery	Architecture, Requirements	Qualification (Data Arch, Design, HSV test)	Operations Rollout / Cutover
Data Comm Network Services (DCNS) Monitoring Service	In Progress	In Progress	TBD	2015
NAS Information Display System (NIDS) Consumer	In Progress	In Progress	TBD	2015
Terminal Automation Modernization and Replacement (TAMR)	In Progress	In Progress	TBD	2015+
Aeronautical Information Management (AIM) Segment 2	In Progress	In Progress	TBD	2015+
Common Support Services – Weather (CSS-Wx)	In Progress	In Progress	TBD	2015+
Terminal Flight Data Manager (TFDM)	In Progress	In Progress	TBD	2015-16



Who is Using SWIM today?

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Consumer	Data Type / Subscription
Airlines	
American Airlines	ASDE-X / LGA, BOS, MIA
Delta Airlines	ASDE-X / LGA
Fedex	ASDE-X / MEM
JetBlue	ASDE-X /all airports
United Airlines	ASDE-X / all airports
USAIR	ASDE-X / PHX, DCA

Consumer	Data Type / Subscription
Research & Development	
Kent State	CIWS / all products
MIT - Lincoln Labs	ASDE-X / all airports, WMSS NEXRAD
MITRE	ASDE-X / all airports
Volpe	ASDE-X / all airports

Airports, FAA Facilities, & FAA Programs	
Atlanta Airport Authority	ASDE-X / all airports
San Francisco (SFO) Airport Authority	SFO Airport Surface Surveillance Capability (ASSC) data
Southern California TRACON	ASDE-X / San Diego, Los Angeles, Long Beach airport data
CIWS	WMSS NEXRAD /all radar sites
CRCT	ASDE-X / LGA, EWR, JFK
OASIS	HWDS / all products
WARP	Enhanced WINS

Industry	
Alliance	ASDE-X / MEM, ATL, JFK
ARINC	CIWS / all products
Lockheed Martin	ASDE-X/ ATL, CLT, MSP, DTW, BOS, IAD, LAS
MOSAIC ATM	ASDE-X / LGA, JFK, BOS, ATL, PHL, EWR, ORD, IAD, CLT; ITWS / all products
Passur	ASDE-X / all airports / STDDS
Rockwell Collins	CIWS / all products
Sabre	ASDE-X / all airports; ITWS / all products
Sensis	ASDE-X / ATL, JFK
Veracity	ASDE-X / LGA





Discussion Framework, Topics

Benefits from FAA viewpoint

- Eliminates proliferation of point-to-point network connections
- SWIM provides consumers authentication and authorization services rather than individual programs
- Utilizes modern interface and data format industry standards and promotes cost effective software reuse
- SWIM provides 24/7 Enterprise monitoring of SWIM services

NextGen Association

- One of the 6 major NextGen Programs

Process of On-Ramping

- Request On-Ramp, Identify messaging type, prototype in R&D (optional), test in FNTB, deploy to OPS.

Mission Support (Admin) Environment

NEMS deployed this year

Example Producer On-Ramps

- 9 live in OPS, 2 near

Example Content



